

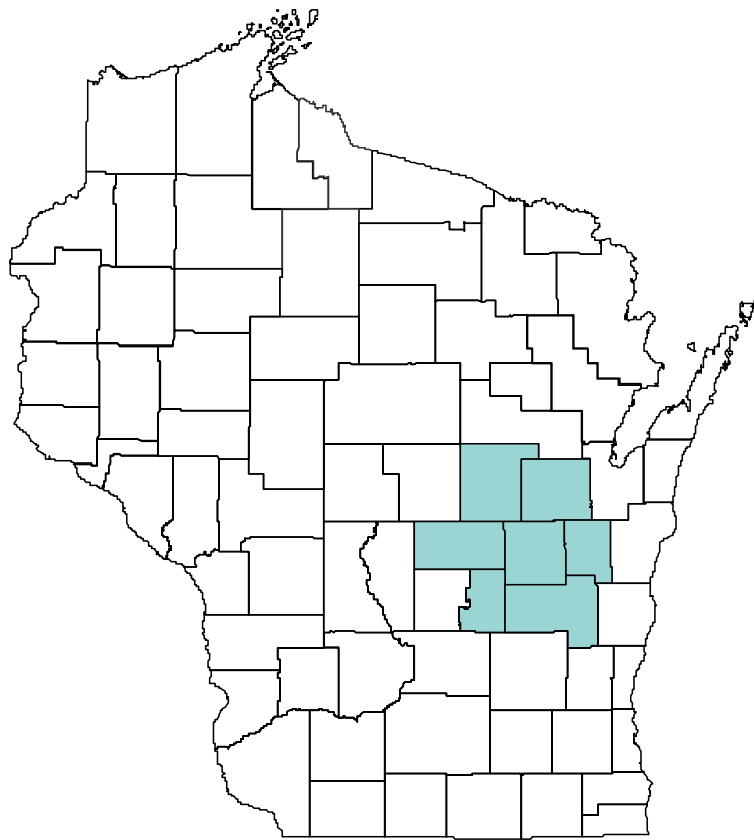
Workforce Development Area Profile

Fox Valley Wisconsin

Calumet, Fond du Lac, Green Lake, Outagamie, Waupaca, Waushara, and Winnebago Counties.

The labor market is a constant ebb and flow of supply and demand. Too little demand for workers creates too much supply and unemployment increases. But too little supply of workers means job vacancies and lack of employment growth.

Every Workforce Development Area in the state should anticipate a tight labor supply condition by the end of the next decade. Planners in each area must understand the unique set of employment characteristics in their region to development a strategy to meet a future where demand will exceed supply.



Richard Seidemann
Regional Labor Market Analyst
920.208.5809
Richard.Seidemann@dwd.state.wi.us



State of Wisconsin
Department of Workforce Development
Office of Economic Advisors
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Industry employment and projections

This profile centralizes current and projected industry, occupation, labor force and demographic information based upon requests and feedback from a diverse customer-base. It has been developed to assist those in workforce and economic development to understand the economic and demographic directions of their communities.

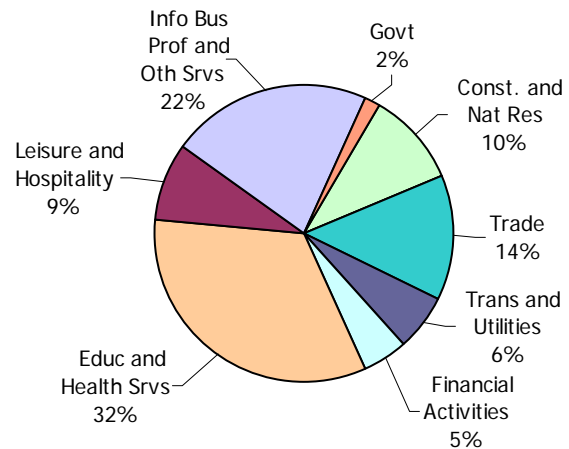
The total number of nonfarm jobs in the seven county Fox Valley Workforce Development Area (Calumet, Fond du Lac, Green Lake, Outagamie, Waupaca, Waushara and Winnebago Counties) is projected to increase 12.2 percent (+34,660 jobs) for a total of 318,216 by the year 2012. Goods-producing sectors in the regional economy will represent nearly 29 percent of the total employment in the region by 2012 down from just under 31 percent in 2002. Goods producing includes construction/mining/natural resources and manufacturing. Services-providing industry sectors will increase from 69 percent of employment to about 71 percent. The table at the bottom of the page lists the region's industry sector growth forecast.

The education and health services sector is projected to show the largest numeric employment growth adding 11,180 jobs between 2002 to 2012. Ambulatory health care services will make up a large portion of the increase by adding nearly 3,300 jobs for a growth rate of 40 percent. This the fastest growth rate for all industry sectors in the Fox Valley WDA. Another 1,800 jobs will be added from growth in hospital services. The educational services component industry,

which includes both publicly and privately owned establishments, will have nearly twice the growth rate of all industries and about one third of the new jobs over the time period will be in this broad industry sector.

Manufacturing is currently the largest employing industry sector in the region and will remain as the largest industry sector in 2012, however other industry sectors will continue to close the gap over the period. Manufacturing employment growth is forecasted to lose 1,050 jobs over the time period.

Distribution of Job Growth by Industry Sectors in Fox Valley Wisconsin: 2002 - 2012



Industry Projections for Fox Valley Workforce Development Area, 2002-2012

Industry Title	Employment		Ten-year change	
	2002 Estimate	2012 Projected	Numeric	Percent
Total Non-farm Employment	283,600	318,260	34,660	12.2%
Construction/Mining/Natural Resources	17,500	21,130	3,630	20.7%
Manufacturing	71,640	70,590	-1,050	-1.5%
Paper Mfg	18,620	16,590	-2,030	-10.9%
Machinery Mfg	10,720	10,650	-70	-0.7%
Transportation Equipment Mfg	5,680	5,860	180	3.2%
Trade	41,740	46,690	4,950	11.9%
Food and Beverage Stores	6,100	6,510	410	6.7%
Transportation and Utilities (Including US Postal)	10,720	12,880	2,160	20.1%
Financial Activities	13,850	15,590	1,740	12.6%
Education and Health Services (Incl'd state & local govt. ed. & hosp.)	46,260	58,070	11,810	25.5%
Ambulatory Health Care Services	8,310	11,640	3,330	40.1%
Hospitals (Including state & local govt.)	8,370	10,200	1,830	21.9%
Leisure and Hospitality	23,610	26,740	3,130	13.3%
Information/Prof Services/Other Services	43,030	50,800	7,770	18.1%
Government (Excluding USPS, state & local govt. ed. and hosp.)	15,240	15,800	560	3.7%

Source: WI DWD, Office of Economic Advisors, September 2004

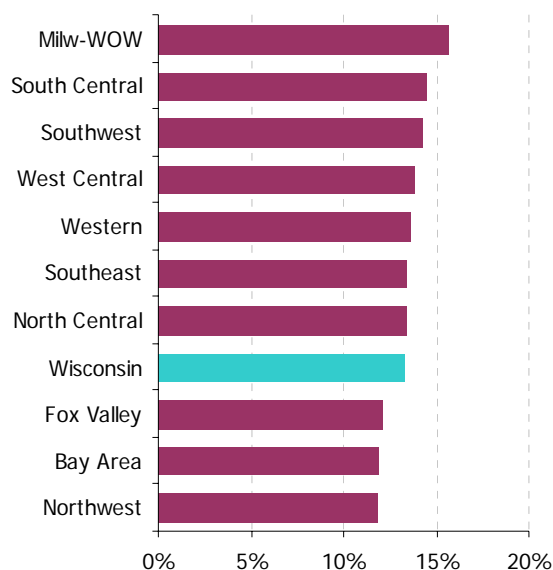
This is primarily a result of consolidation in the paper manufacturing industry. This subgroup is expected to lose over 2,000 jobs during this time. The decline in jobs in this industry group will lessen the need for skilled workers for new positions and positions that become available as workers from the “baby boom” generation begin to retire over the next ten years. However, it will not eliminate the need for new skilled workers in this industry sector. This will be discussed in more detail in the profile’s section detailing occupational projections.

The other goods-producing sector; construction, mining and natural resources will show much faster employment growth in comparison to the manufacturing sector gaining 3,363 jobs (+20.7%) over the projection period. It is estimated that construction industry employment, alone, makes up close to 90 percent of this sector’s employment and therefore will be the major contributor to this sector’s growth. Though it only comprises about five percent of the region’s total employment, construction’s importance is underscored due to its role in economic and infrastructure development as well as the higher than average annual wages it pays its workers (\$39,704 in 2003).

The information, professional, business and other services sector is an amalgam of many component industries, many of whom have relationships or support roles with other local industry sectors. Its employment is projected to grow strongly (7,770) providing the second greatest number of new jobs in the region of all the industry sectors. Examples of this sector’s component industries include newspaper publishers, computer systems designers, law firms, temporary employment agencies, travel agencies and scientific testing laboratories. The majority of this broad sector’s employment, about one-third of it, is based in professional and business services employment, which has large contingent of its workers employed by employment placement agencies and temporary employment agencies. Employment via these agencies has grown incredibly fast recently indicating a rebound in the economy. Many employers have found it easier and faster to contract with these agencies to find immediate help for their changing workloads than to directly recruit new workers themselves. These contracted workers are placed among many industries, but it is likely that much of this increased personnel in the Fox Valley Area has been directed to manufacturers. Other industries in this sector, such as accounting firms and advertising services, also cluster around client establishments.

Industry sectors projected to show the least dynamic change in the Fox Valley WDA include government employment (560) (excluding education and health care establishments) and manufacturing (1,050) activities. The latter sector is

Changes in Employment for Workforce Development Areas in Wisconsin: 2002 - 2012



Source: WI DWD, Office of Economic Advisors, Sept. 2004

projected to decline 1.5 of a percent during the time period. Again, this decline is linked mainly to projections in the paper manufacturing industry sector which is expected to decline by 2,030 jobs over the period. Much of the decline will be due to company mergers, over capacity in the industry as well as productivity increases. This has been occurring in the industry since the late 1990’s in the Fox Valley. However, it is not just the paper manufacturing sub group of manufacturing that is projected to decline. The machinery manufacturing sub group is expected to decline by 70 over the period. On the positive side, the transportation equipment manufacturing industry is expected to increase by 180 over the period. Many of the jobs in this sub group are dependant on government contracts both local government for fire fighting equipment as well as military equipment. The slow growth in government employment (3.7%) will likely be a combination of local and state government establishments as they deal with funding shortages.

The Fox Valley Area’s total employment growth is lower than state average and ranks near the bottom of the State’s WDAs as shown in the above graph.

Industry projections are a good start to regional analysis, but they need to be complemented with occupational analysis and population research. These topics will be discussed further into the profile. The region’s age demographics, more specifically its aging population, will be the most significant factor in its industrial and occupational changes as well as the labor force’s pool of workers.

Employment and wages

The Fox Valley Area all industry wages, are very similar to Wisconsin's 2003 annual average for all industries at 97 percent of the statewide average. The highest paying sector in the Fox Valley WDA is manufacturing. Manufacturing wages in the area are at 103 percent of the statewide average. This is influenced in part by the presence of the paper industry. The lowest paying industry, relatively speaking, is the other services sector paying 85 cents to its workers for every dollar of the statewide average for this group.

The graph below distributes each sector's percentage share of total employment and total payroll in the region. For example, as of 2003, manufacturing represented 24 percent of all regional jobs, but comprised a significantly higher share, 31 percent, of the total wages paid.

Annual industry sector wage levels are chiefly dictated by their component industries' and the workers' occupations in their employ. They are also influenced by geographic location, lengths of workweeks, seasonal duration, and unioniza-

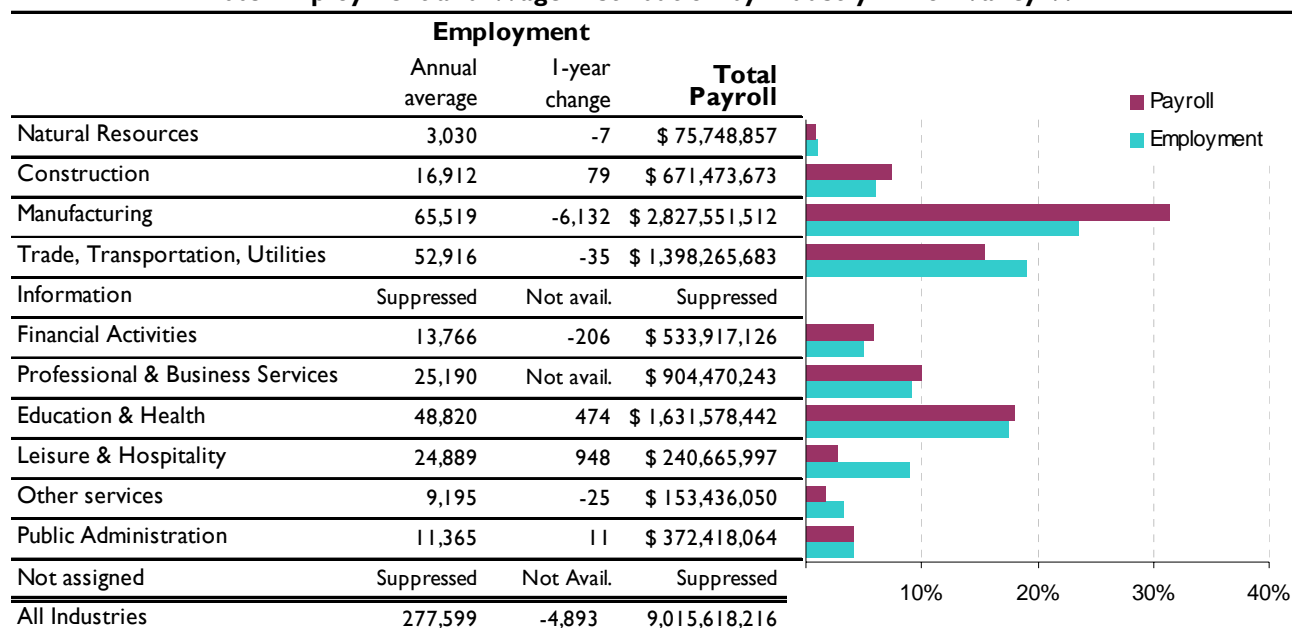
2003 Average Annual Wage by Industry Division in Fox Valley WDA

	Average Annual Wage Wisconsin	Average Annual Wage Fox Valley	Percent of Wisconsin	1-year % change
All Industries	\$ 33,423	\$32,477	97%	2.9%
Natural resources	\$ 25,723	\$25,000	97%	1.0%
Construction	\$ 40,228	\$39,704	99%	1.4%
Manufacturing	\$ 42,013	\$43,156	103%	0.4%
Trade, Transportation, Utilities	\$ 28,896	\$26,424	91%	3.3%
Information	\$ 39,175	Not avail.	Not avail.	Not avail.
Financial activities	\$ 42,946	\$38,785	90%	8.2%
Professional & Business Services	\$ 38,076	\$35,906	94%	Not avail.
Education & Health	\$ 35,045	\$33,420	95%	3.2%
Leisure & Hospitality	\$ 12,002	\$9,670	81%	2.2%
Other services	\$ 19,710	\$16,687	85%	-0.4%
Public Administration	\$ 35,689	\$32,769	92%	6.7%

Source: WI DWD, Bureau of Workforce Information, Quarterly Census of Employment & Wages

tion. The manufacturing sector is a great example of this. Nearly 70 percent of the industry is in the Appleton and Oshkosh areas. These two metropolitan areas have a variety of characteristics influencing these high wages such as unionized production workers and corporate headquarters with executive ranked management, both of whom tend to command higher than average wages.

2003 Employment and Wage Distribution by Industry in Fox Valley WDA



Source: WI DWD, Bureau of Workforce Information, Quarterly Census of Employment & Wages

Significant industries

Top Five Industries in Fox Valley WDA

Industry	March-2004		Numeric Employment Change	
	Establishments	Employees	2003 - 2004	1999 - 2004
Educational Services	98	19,580	11	1,787
Food Services and Drinking Places	893	18,632	27	1,255
Paper Manufacturing	64	12,883	-1,206	-7,173
Administrative and Support Services	412	11,244	-39	1,189
Machinery Manufacturing	102	10,606	231	-2,968

Source: DWD, Bureau of Workforce Information, Quarterly Census of Employment and Wages

The top 5 industries list, above, is more industry-specific than the industry sector lists on pages 1 and 2, which are a broader classification. The Fox Valley WDAs five largest industries as of March 2004 accounted for just over one out of every five regional jobs.

The following pages take a closer look at the Fox Valley Area's top 5 industries detailing their 20 largest occupations (listed in descending order via statewide occupational patterns as region-specific patterns are not available). Two classifications are from manufacturing, represented are machinery manufacturing and paper manufacturing.

A brief description of these industries and the top 20 occupations that are projected to have the most job gain by 2012 follows. The occupations listed reflect Wisconsin trends for the industry (local data is not available).

Share of jobs in top five industries in Fox Valley WDA



I. Education Services

This industry includes both publicly and privately-owned establishments. The majority of this sector's employment is in K-12 public school districts and technical college campuses, which are part of local government ownership. The University of Wisconsin two year campuses located throughout the region are often locally owned, but are state government staffed while the four year campuses are state owned and staffed. Parochial schools and private colleges are also included in this industry.

Total employment is expected to increase by 19 percent from 2002 to 2012 providing nearly 2,600 more jobs. Most of the occupational needs will be K-12 teachers and support staff. The impetus for this sector's growth and top ranking is rooted both demographically and economically. Although not all areas within the region will see the growth in this industry. The growth will occur in the more urban areas that have younger populations and greater family in-migration.

Economically, the current and projected changes in the area's job base have increased the demand for skills training and re-training at the region's technical college campuses. Vocational training and other forms of adult education will likely maintain their appeal over the short- and medium-term.

Top 20 Occupations in Wisconsin in Education Services Ranked by number of jobs projected in 2012

- Elementary School Teachers, Except Special Education
- Secondary School Teachers, Except Special and Vocational Education
- Teacher Assistants
- Middle School Teachers, Except Special and Vocational Education
- Janitors and Cleaners, Except Maids and Housekeeping Cleaners
- Vocational Education Teachers, Postsecondary
- Education Administrators, Elementary and Secondary School
- Special Education Teachers, Preschool, Kindergarten, and Elementary School
- Kindergarten Teachers, Except Special Education
- Educational, Vocational, and School Counselors
- Executive Secretaries and Administrative Assistants
- Cooks, Institution and Cafeteria
- Special Education Teachers, Secondary School
- Graduate Teaching Assistants
- Coaches and Scouts
- Vocational Education Teachers, Secondary School
- Special Education Teachers, Middle School
- Librarians
- Business Teachers, Postsecondary
- Bus Drivers, School

Source: WI DWD, Office of Economic Advisors, Sept. 2004

II. Food Services and Drinking Places

This industry is usually one of the top five employers in all the state's region, frequently in the top three spots as well as nationally. It is a component industry within the leisure and hospitality sector, which is projected to show above average growth in the Fox Valley.

The majority of employment this industry is in full-service and fast food restaurants. Serving related occupations and food preparation provide the greatest number of jobs in the industry.

This industry has experienced continued growth over the last several decades. Its projected growth rate during the next decade while not substantially greater than the region's growth as a whole, the size times the growth rate makes it a significant factor in the regional economy.

Many of the jobs in the sector are entry-level and are paid commensurate to low-skilled employment. Employment durations can be very seasonal and the length of the work week weighs heavily towards part-time schedules. Census data from 2000 estimates an average workweek of about 31 hours and a work-year of about 43 weeks for those working in this industry. Some jobs are high skill and offer good wages, while other are dependant on tips and often offering opportunities for better wages.

III. Paper Manufacturing

The paper manufacturing industry is expected to decline just over 10 percent over the ten year period. This is a result of changes occurring in the industry. This includes increased productivity in the industry, over capacity, and industry mergers that have been changing and will continue to dramatically change the landscape of this industry group. The changes will continue to shape the types of jobs that remain and new jobs that are created in lieu of these changes.

Even though employment in this industry sub group is expected to decline by 2,000 jobs, the industry will still provide jobs for one out of every 20 workers in the region. Generally the jobs in the paper industry are at the higher end of the pay scale. The decline in jobs when coupled with the aging population of baby boomers that are anticipating retirement during the next decade indicates that there will still be some employment opportunities for workers in this industry. Generally all the jobs require good math skills, including entry level positions. Many of the skilled positions require vocational education and on the job training.

Top 20 Occupations in Wisconsin in Food Services and Drinking Places Ranked by number of jobs projected in 2012

Waiters and Waitresses
Combined Food Preparation and Serving Workers, Including Fast Food
Bartenders
Cooks, Restaurant
Cooks, Fast Food
First-Line Supervisors/Managers of Food Preparation and Serving Workers
Dishwashers
Food Preparation Workers
Cooks, Short Order
Dining Room and Cafeteria Attendants and Bartender Helpers
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop
Food Service Managers
Chefs and Head Cooks
Cashiers
Janitors and Cleaners, Except Maids and Housekeeping Cleaners
Driver/Sales Workers
General and Operations Managers
Truck Drivers, Light or Delivery Services
Bakers

Source: WI DWD, Office of Economic Advisors, Sept. 2004

Top 20 Occupations in Wisconsin in Paper Manufacturing

Paper Goods Machine Setters, Operators, and Tenders
Helpers--Production Workers
Packaging and Filling Machine Operators and Tenders
Printing Machine Operators
Industrial Truck and Tractor Operators
First-Line Supervisors/Managers of Production and Operating Workers
Maintenance and Repair Workers, General
Laborers and Freight, Stock, and Material Movers, Hand
Packers and Packagers, Hand
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders
Industrial Machinery Mechanics
Cutting and Slicing Machine Setters, Operators, and Tenders
Inspectors, Testers, Sorters, Samplers, and Weighers
Customer Service Representatives
Sales Reps, Wholesale & Manufacturing, Except Technl-Scientific Products
Millwrights
Extruding/Forming/Pressing, & Compacting Mach. Setters/Operators/Tende
Electricians
Shipping, Receiving, and Traffic Clerks
Chemical Equipment Operators and Tenders

Source: WI DWD, Office of Economic Advisors, Sept. 2004

IV. Administrative and Support Services

This industry is a part of the broad and diverse information, professional and business services, and other services sector. In the Fox Valley this industry is primarily composed of those working in employment services and services to buildings and dwellings. Employment is representative of those working for temporary employment agencies or other types of personnel supply agencies, who are contracted to various types of employers. Services to buildings and other dwellings represents workers mainly in janitorial, cleaning and landscaping businesses.

The list of top occupations in administrative and support services includes a variety of jobs. The two largest occupations are connected to the cleaning and landscaping industries. The majority of the remaining occupations represent contracted or temporary workers in manufacturing establishments and other types of businesses seeking clerical staff, medical staff, etc.

Employment growth in this sector is expected to be well-above average throughout the projection period. This is currently one of the fastest growing industries in Wisconsin and is looked to as a gauge of economic recovery as many establishments hire temporary workers in light of newly increasing workloads. It has also become commonplace for these contracted workers to remain agency-employed rather than permanently hired by their contractor establishment.

V. Machinery Manufacturing

Machinery manufacturing is one of two sectors from the manufacturing industry group that are represented in the top five industries in the Fox Valley Area. This sector represents high skilled workers in the production of new machinery.

The occupations in this sector, are mainly jobs that are involved in the production process, which is typical for durable goods manufacturing. Nationally, approximately two-thirds of workers in manufacturing are involved in production. Due to the nature of the product, a high proportion of the jobs in this sector require high levels of skills. Many of them some form of secondary education such as vocational/technical schooling, or apprenticeships as well as bachelor degrees and beyond for the engineering and designing positions.

This sector was affected by the decline in the economy beginning in 2000 as businesses slowed their investment in new machinery. This has improved during the last year as the economy has begun to improve. This sector has come under a great deal of competition from overseas production, however, the skills and equipment required for this sector has assisted this group to recover as the economy improves from the recession.

Top 20 Occupations in Wisconsin in Administrative and Support Services Ranked by number of jobs projected in 2012

Janitors and Cleaners, Except Maids and Housekeeping Cleaners
Laborers and Freight, Stock, and Material Movers, Hand
Landscaping and Groundskeeping Workers
Office Clerks, General
Packers and Packagers, Hand
Maids and Housekeeping Cleaners
Security Guards
Helpers--Production Workers
Cashiers
Customer Service Representatives
Telemarketers
Nursing Aides, Orderlies, and Attendants
Packaging and Filling Machine Operators and Tenders
Team Assemblers
Executive Secretaries and Administrative Assistants
Receptionists and Information Clerks
Bookkeeping, Accounting, and Auditing Clerks
Registered Nurses
Inspectors, Testers, Sorters, Samplers, and Weighers
Bindery Workers

Source: WI DWD, Office of Economic Advisors, Sept. 2004

Top 20 Occupations in Wisconsin in Machinery Manufacturing Ranked by number of jobs projected in 2012

Machinists
Engine and Other Machine Assemblers
Team Assemblers
First-Line Supervisors/Managers of Production and Operating Workers
Mechanical Engineers
Welders, Cutters, Solderers, and Brazers
Computer-Controlled Machine Tool Operators, Metal and Plastic
Tool and Die Makers
Inspectors, Testers, Sorters, Samplers, and Weighers
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic
Industrial Machinery Mechanics
Industrial Truck and Tractor Operators
Industrial Engineers
Grinding/Lapping/Polishing/Buffering Mach. Tool Setters/Oprs/Tndrs, Mtl-Plastic
Mechanical Drafters
Engineering Managers
Electrical and Electronic Equipment Assemblers
Production, Planning, and Expediting Clerks
Lathe & Turning Machine Tool Setters, Operators, & Tenders, Metal-Plastic
Maintenance and Repair Workers, General

Source: WI DWD, Office of Economic Advisors, Sept. 2004

Occupation projections

Occupational Group Summary for Fox Valley Workforce Development Area

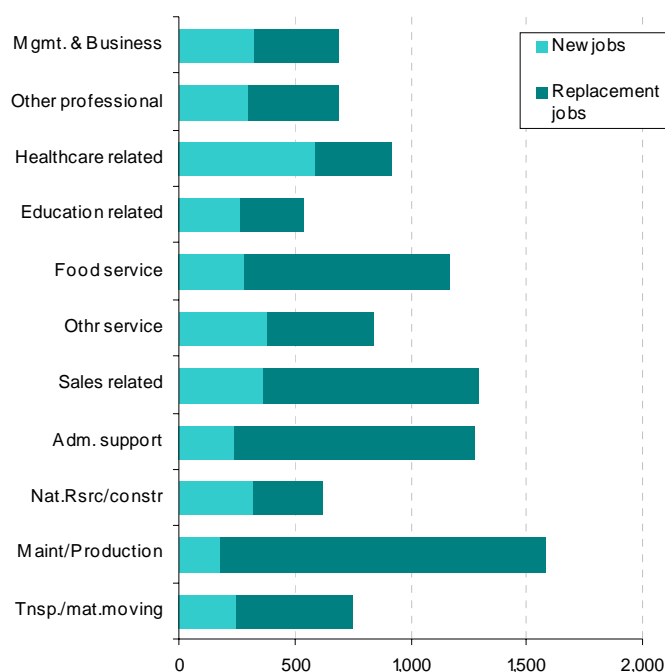
Occupational Groups	Estimated Employment		2002 - 2012 Change		Annual average			Average hourly wage	Annual average wage
	2002	2012	Numeric	Percent	New Jobs	Replacements	Total Openings		
Total, All Occupations	283,600	318,260	34,660	12.2%	3,470	6,860	10,330	\$15.51	\$32,254
Management, Business & Financial Operations	19,430	22,630	3,200	16.5%	320	370	690	\$30.37	\$63,160
Computer, Math, Architecture & Engineering	8,670	9,740	1,070	12.3%	110	170	280	\$26.44	\$54,992
Life & Social Sciences, Legal, Art & Entertaining	11,460	13,320	1,860	16.2%	190	220	410	\$19.62	\$40,814
Education, Training, & Library	13,330	15,900	2,570	19.3%	260	280	540	\$18.25	\$37,959
Healthcare Practitioners, Technicians & Support	18,550	24,400	5,850	31.5%	590	330	920	\$20.19	\$42,001
Food Preparation & Serving	22,410	25,180	2,770	12.4%	280	890	1,170	\$7.90	\$16,422
Protective, Maintenance & Personal Care Service	20,110	23,930	3,820	19.0%	380	460	840	\$10.87	\$22,609
Sales and Related	27,020	30,700	3,680	13.6%	370	920	1,290	\$13.98	\$29,077
Office/Administrative Support	45,150	47,510	2,360	5.2%	240	1,040	1,280	\$12.45	\$25,903
Natural Resources, Mining & Construction	15,120	18,290	3,170	21.0%	320	300	620	\$18.25	\$37,954
Installation, Maintenance, Repair & Production	59,120	60,880	1,760	3.0%	180	1,400	1,580	\$15.24	\$31,693
Transportation/Material Moving	23,240	25,770	2,530	10.9%	250	500	750	\$13.26	\$27,576

Source: Wisconsin Department of Workforce Development, Office of Economic Advisors, September 2004

The occupation projections for Wisconsin's Fox Valley WDA over a ten-year period that ends in 2012 include 34,660 new jobs. These will be created as employers move to the area and when existing employers expand. The projections also include 109,300 additional job openings generated when

workers leave an occupation and create a need for a replacement worker. An example of this would be a nurse aide who, after completing training, becomes a registered nurse or retires. Replacement needs do **not** include an opening that occurs when a nurse aid leaves one employer to work for another in the same occupation.

Annual Openings by Occupation Groups in Fox Valley WDA



Source: WIDWD, Office of Economic Advisors, September 2004

The total number of jobs in occupations will increase from 283,600 in 2002 to 318,260 by 2012. The greatest increase, 31.5 percent of all new jobs, occurs in healthcare practitioners, technicians & support occupations with the addition of 5,850 jobs. The share of jobs in healthcare increases from 5.8 percent to 7.7 percent of all jobs in the Fox Valley WDA. This occupation not only is adding the most new jobs over the period, but it also has the fastest growth rate of all of the occupational groups.

Protective, maintenance and personal care service is a very broad group of occupations that will add an additional 3,820 jobs over the ten year period. Other strong growth occupations in the area include: Sales and Related; Management, business and financial operations and natural resources, mining and construction. Most of these occupations will be in the construction sector. Mining in the Fox Valley WDA is primary in the form of stone quarries.

Although the growth rate of jobs in the installation, maintenance, repair and production occupations, will be less than other occupations, the large size of the group will raise its share from 18.6 percent to 19.1 percent of all jobs in 2012. As a group, it will continue to have the greatest

Twelve Occupations with the Most Annual Openings from 2002-2012 in Fox Valley Workforce Development Area

Occupational Title	Estimated Employment		2002-2012 Change		Annual average			Typical Education or Training Path	Average Wage	Middle 50 Percent Hourly Wage Range
	2002	2012	Numeric	Percent	New Jobs	Replacements	Total Openings			
Retail Salespersons	8,870	10,070	1,200	13.5%	120	320	440	1 mo. or less trng. on-the-job	\$10.69	\$7.11 - \$11.42
Cashiers	6,760	7,580	820	12.1%	80	330	410	1 mo. or less trng. on-the-job	\$7.72	\$6.47 - \$8.65
Waiters/Waitresses	4,640	5,270	630	13.6%	60	240	300	1 mo. or less trng. on-the-job	\$7.05	\$5.98 - \$7.80
Comb Food Prep/Server/Incl Fast	4,470	5,370	900	20.1%	90	190	280	1 mo. or less trng. on-the-job	\$7.45	\$6.24 - \$8.36
Registered Nurses	3,910	5,150	1,240	31.7%	120	80	200	Bachelor's or Assoc. degree**	\$23.03	\$20.05 - \$26.08
Truck Drivers/Hvy/Tractor-Trailer	4,700	5,720	1,020	21.7%	100	80	180	1-12 mo. training on-the-job	\$17.16	\$13.75 - \$20.45
Janitors/Cleanrs Ex Maids/Hskpng	4,990	5,770	780	15.6%	80	100	180	1 mo. or less trng. on-the-job	\$9.99	\$7.94 - \$11.45
Labrs/Frght/Stock/Matrl Movrs/Hand	4,950	5,000	50	1.0%	10	160	170	1 mo. or less trng. on-the-job	\$11.00	\$8.07 - \$13.37
Office Clerks/General	4,970	5,430	460	9.3%	50	110	160	1 mo. or less trng. on-the-job	\$10.74	\$8.40 - \$12.58
Nursing Aides/Orderlies/Attndnts	3,990	4,950	960	24.1%	100	50	150	1 mo. or less trng. on-the-job	\$10.20	\$8.97 - \$11.33
Sls Reps/Whls/Mfg/Ex Tech/Sci	3,150	3,720	570	18.1%	60	80	140	1-12 mo. training on-the-job	\$23.83	\$15.50 - \$29.48
Customer Service Reps	3,810	4,510	700	18.4%	70	60	130	1-12 mo. training on-the-job	\$13.13	\$9.88 - \$15.49

Source: WI DWD, Office of Economic Advisors, September 2004

* may include classroom instruction ** depends on employer

quantity of jobs in the Fox Valley. The second greatest share of jobs is in the office and administrative support occupations. This occupational due to its size shows a slower growth rate, but increases it share of total jobs from 14.2 percent to 14.9 percent. In both occupational groups the number of replacement jobs is at least five times or more the number of new jobs.

Together, new jobs and replacement jobs, produce the total (annual) jobs openings projected for an occupation over the projection period. In nearly all occupation groups, except health related occupations, the number of replacement jobs exceeds the number of jobs created from growth. Both

sources of job openings are important. Too often the focus is only on job growth and little attention is given to the vacancies generated from replacement needs. But as baby-boomers approach retirement age the need to fill replacement jobs looms on the horizon. The average age of all workers in 2000 was 39-40 years but that increased in occupations that require a degree.

Looking at the chart on page 7 leaves no doubt that the occupation group that will have the most new jobs during the projection period is healthcare. There are 61 health related occupations in the WDA and registered nurses is the occupation projected to generate the most new jobs. Third

Twelve Occupations with the Greatest Percent Change from 2002-2012 in Fox Valley Workforce Development Area

Occupational Title	Estimated Employment		2002-2012 Change		Annual average			Typical Education or Training Path	Average Wage	Middle 50 Percent Hourly Wage Range
	2002	2012	Numeric	Percent	New Jobs	Replacements	Total Openings			
Medical Assts	530	860	330	62.3%	30	10	40	1-12 mos. training on-the-job	\$11.50	\$10.01 - \$13.01
Medcl Records/Health Info Techs	300	470	170	56.7%	20	0	20	Associate degree	\$11.04	\$9.75 - \$12.35
Home Health Aides	1,010	1,520	510	50.5%	50	10	60	1 mo. or less trng. on-the-job	\$9.48	\$8.26 - \$10.85
Netw Systms/Data Comm Analysts	180	270	90	50.0%	10	0	10	Bachelor's degree	\$26.64	\$18.08 - \$31.68
Dental Hygienists	380	550	170	44.7%	20	0	20	Associate degree	\$25.04	\$23.87 - \$26.96
Social/Human Service Assts	660	950	290	43.9%	30	10	40	1-12 mos. training on-the-job	\$11.90	\$9.46 - \$13.60
Dental Assts	600	860	260	43.3%	30	20	50	1-12 mos. training on-the-job	\$13.56	\$11.80 - \$14.77
Personal and Home Care Aides	1,200	1,720	520	43.3%	50	20	70	1 mo. or less trng. on-the-job	\$8.80	\$7.76 - \$9.64
Personal Financial Advisors	140	200	60	42.9%	10	0	10	Bachelor's degree	\$26.49	\$16.99 - \$33.09
Veterinary Technologists/Techs	140	200	60	42.9%	10	0	10	Associate degree	\$13.80	\$11.16 - \$16.60
Physical Therapists	270	380	110	40.7%	10	0	10	Master's degree	\$30.23	\$25.16 - \$33.36
Heating/AC/Refrig Mechs/Instlrs	510	710	200	39.2%	20	10	30	1 yr. or more trng. on-the-job*	\$16.83	\$12.94 - \$20.23

Source: WI DWD, Office of Economic Advisors, September 2004

* may include classroom instruction ** depends on employer

on that list (not included in this profile) is nurse aides, orderlies and attendants. Both also appear on the list of most total annual openings (page 8).

The openings in the twelve occupations on the list on the top of page eight equals 26 percent of the total annual openings in the Fox Valley. Eight of the twelve jobs typically require one month or less training. These are often good jobs for workers entering the labor force, attending school, working another job, or seeking supplemental income. These jobs are often scoffed at, but they offer potential that is often overlooked. Supervisors and middle-managers acquire experience from these jobs and may be promoted from within the company. Although wages are lower, there are opportunities within these occupations for high income. Waiters/waitresses is a good example where a worker can earn above-average wages while working fewer hours. Three occupations require intermediate training, while only one occupation, registered nurses, requires post secondary schooling.

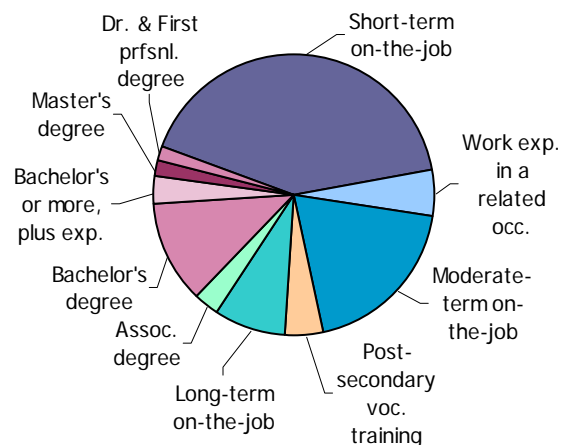
The list on the bottom of page eight also includes occupations with minimal training requirements but more of them require additional training or a degree. Many times the occupations on this list, a.k.a. "The Hot Jobs" list, have smaller employment levels. The sum of the total openings in the twelve occupations on the bottom list represents only 3.6 percent of all total openings projected for the Fox Valley.

Seven of the twelve occupations with the greatest percent increase are health care occupations. This does not include a related occupation of veterinary technologist/technicians. The fastest growing occupation in Fox Valley and the nation is medical assistants. Employment in the occupation in the Fox Valley will increase from 530 in 2002 to 860 in 2012. Currently entry into the field preferred by most employers is

for graduates from a formal program in medical assisting. In the Fox Valley and Wisconsin these programs are most commonly offered by vocational schools. Medical assistants perform routine administrative and clinical tasks to keep medical offices running smoothly. That can vary from answering phones to taking medical histories and instructing patients about medications and special diets.

Following the baby-boom rush employers switched from in-house training to training provided by education institutions. Many jobs that typically were filled by someone with moderate - to long-term on-the-job training now require vocational training. Basic requirements for jobs with advanced degrees have not changed and only 18.6 percent of the total job openings projected will require a bachelor's degree or higher.

Distribution of Total Openings in Fox Valley WDA by Training Path



Typical Education or Training Path* for Jobs in Fox Valley Workforce Development Area

Education or Training	Number of Occupations	Estimated Employment		2002-2012 Change		Annual average			Distribution of Total Openings
		2002	2012	Numeric	Percent	New Jobs	Replacements	Total Openings	
Total	743	283,590	318,270	34,680	12.2%	3,470	6,900	10,370	100.0%
Associate degree	35	6,870	8,410	1,540	22.4%	150	130	280	2.7%
Bachelor's degree	107	32,450	38,350	5,900	18.2%	590	640	1,230	11.9%
Master's degree	37	5,100	6,010	910	17.8%	90	110	200	1.9%
First professional degree	16	2,210	2,800	590	26.7%	60	30	90	0.9%
Doctoral degree	40	1,730	2,210	480	27.7%	50	40	90	0.9%
Long-term on-the-job training	81	25,000	28,130	3,130	12.5%	310	550	860	8.3%
Moderate-term on-the-job training	169	68,940	73,970	5,030	7.3%	500	1,480	1,980	19.1%
Short-term on-the-job training	136	104,390	116,210	11,820	11.3%	1,180	3,130	4,310	41.6%
Bachelor's degree or more, plus work exp.	30	9,200	10,560	1,360	14.8%	140	180	320	3.1%
Work exp. in a related occupation	42	16,520	18,680	2,160	13.1%	220	350	570	5.5%
Postsecondary vocational training	50	11,180	12,940	1,760	15.7%	180	260	440	4.2%

* This provides a general indication of the education or training typically needed in occupations. There may be other pathways.

Source: WI DWD, Office of Economic Advisors, September 2004

Total personal income

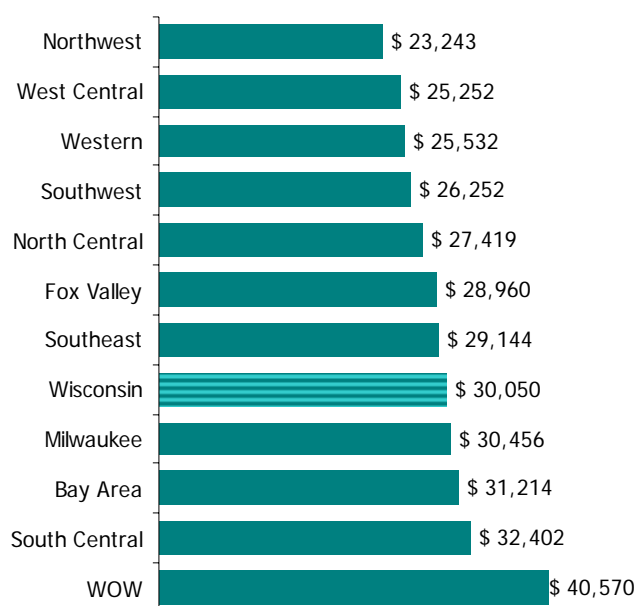
Total personal income is the sum of net earnings, income from dividends, interest and rent, and receipts from transfer payments. Just over two-thirds of total personal income (TPI) in the Fox Valley comes from net earnings. Net earnings include wage and salary disbursements including employers contributions for pension, insurance and government social insurance, proprietor's income, and adjustment for residents who work in jobs outside the area.

Dividends, interest and rent receipts make up 17.4 percent of TPI in the WDA. And, 69.2 percent of TPI is from net earnings.

In the last five years TPI increased 26.8 percent in the Fox Valley, just above the State of Wisconsin but still below the United States. In spite of this growth in TPI per capita personal income increased only 21.3 percent, less than either Wisconsin or the United States, .

Per capita personal income (PCPI) is the product of total personal income divided by total population. If a greater share of residents are younger or older they contribute less (or not at all) to total income. A region that has a higher share of younger or older population will have a lower PCPI. Conversely, a population with a greater share of residents middle-aged (and in their prime working years) will generally

Per Capita Personal Income by WDA



Source: US Dept. of Commerce, Bureau of Economic Analysis

Total Personal Income in Fox Valley Workforce Development Area

% Change from 1997 to 2002

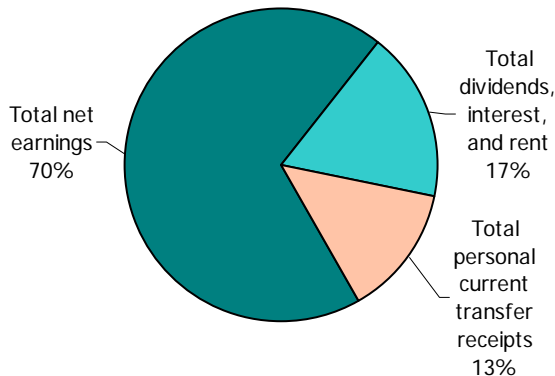
	1997	2002	Fox Valley	Wisconsin	United States
Population	535,393	559,684	4.5%	3.3%	5.6%
Total Personal Income (in thousands)	\$12,777,879	\$16,208,707	26.8%	26.6%	28.8%
Net Earnings	\$8,780,365	\$11,219,243	27.8%	27.6%	30.4%
Dividends, Interest, and Rental Income	\$2,458,268	\$2,815,298	14.5%	14.9%	18.4%
Transfer Receipts	\$1,539,246	\$2,174,166	41.2%	39.4%	35.8%
Income Maintenance	\$75,383	\$95,575	26.8%	29.1%	21.3%
Unemployment insurance benefit payments	\$48,474	\$126,767	161.5%	147.2%	166.1%
Retirement and other	\$1,415,389	\$1,951,824	37.9%	36.9%	34.4%
Per Capita Personal Income	\$23,866	\$28,960	21.3%	22.6%	22.0%
Per Capita Net Earnings	\$16,400	\$20,046	22.2%	23.5%	23.4%
Per Capita Dividends, Interest, and Rental Income	\$4,592	\$5,030	9.6%	11.3%	12.1%
Per Capita Transfer Receipts	\$2,875	\$3,885	35.1%	35.0%	28.6%
Total Employment (see glossary)	331,565	348,724	5.2%	5.0%	7.3%
Wage and salary jobs	283,877	299,946	5.7%	4.3%	5.9%
Number of non-farm proprietors	39,602	40,855	3.2%	11.2%	16.0%
Average earnings per job	\$29,531	\$35,625	20.6%	21.0%	21.2%
Average wage & salary disbursements	\$26,722	\$31,125	16.5%	19.0%	21.1%
Average nonfarm proprietors income	\$14,821	\$24,644	66.3%	37.0%	24.7%

Source: Special tabulation by WI DWD, Office of Economic Advisors & US Dept. of Commerce, Bureau of Economic Analysis, May 2004

have a higher PCPI. Earnings from employment are the greatest source of total personal income.

The remaining 13.4 percent of TPI is from personal current transfer receipts. Transfer receipts include benefits from

**Major Components of Total Personal Income
in 2002 in
Fox Valley Workforce Development Area**



Source: Special tabulation by WI OEA & US BEA files

government social insurance funds, primarily social security and Medicare, and other programs. Unlike the first two components transfer receipts increased more rapidly in the latter years of the five-year period but the reason was still the recession and retirements (which could be related to layoffs). Payments of unemployment insurance benefits rose 161.5 percent in the WDA from 1997 to 2002, an increase that was less than nation, but greater than the state.

Currently there is a higher share of population under 20 in the

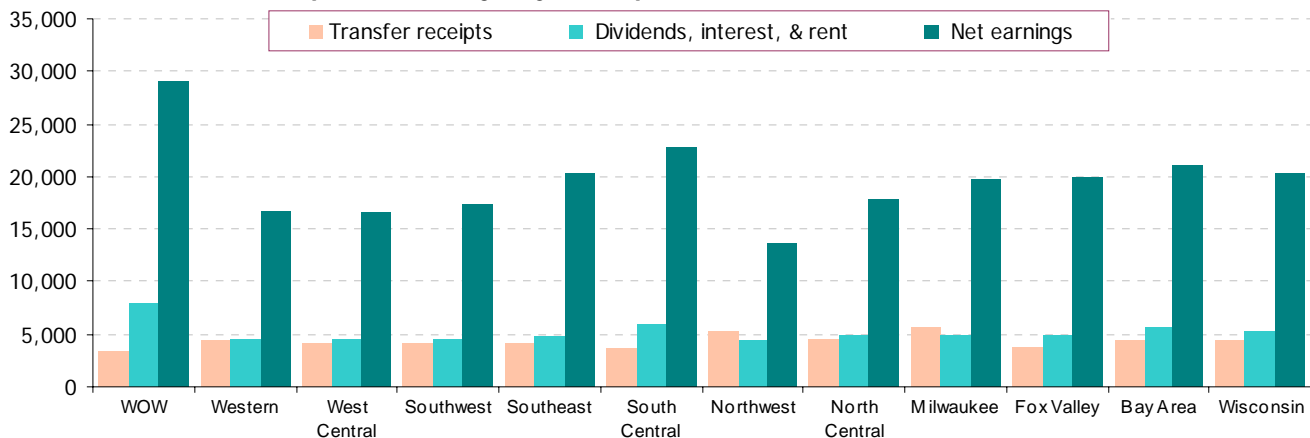
Fox Valley, 27 percent, and a smaller share aged over 65 years – 18 percent. These percentages are near the middle when compared to other areas in the state.

The Fox Valley has the sixth highest PCPI of all of the WDAs in Wisconsin and is about \$1,100 below the statewide average. Although the Fox Valley WDA has a large portion of its workforce located within the Appleton/Oshkosh MSA, a large portion of the area remains rural, even within the MSA counties. This has a tendency to reduce overall wages. Generally wages are higher in metropolitan areas than they are in rural areas.

Net earnings for the Fox Valley Area was \$20,046, this was fifth highest in the state. The area ranked fourth in income from dividends, interest and rent. Income from transfer payments only ranked ninth at \$3,885, which lowered total PCPI to the sixth ranking WDA in the state.

The bottom chart graphically displays the per capita income by major component for each workforce development area. In all WDAs net earnings greatly exceed transfer receipts and dividends, interest and rent. But the income from the latter component varies by region and reflects the affluence of the area.

Per Capita Income by Major Components of Total Personal Income: 2002



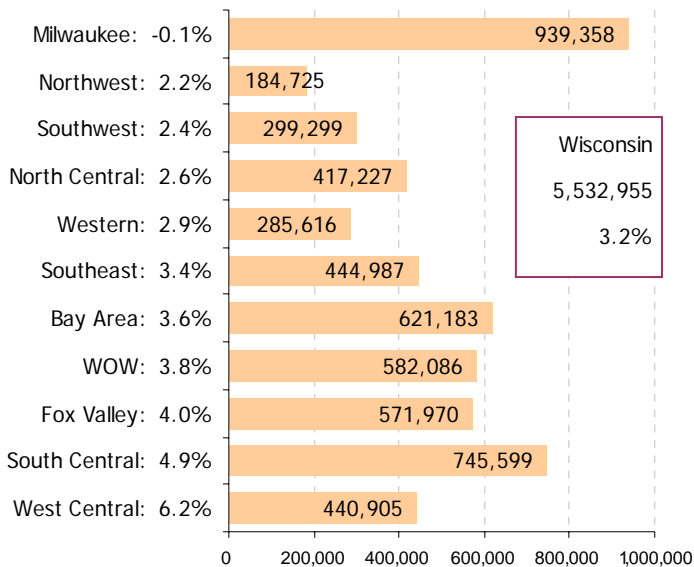
Source: Special tabulation by WI DWD, Office of Economic Advisors & US Dept. of Commerce, Bureau of Economic Analysis

Connecting the Elements

Population dynamics have always been key in workforce and economic development. Very simply, they are the pool of workers and they set the tone as consumers of our goods and services fueling two-thirds of the overall economy.

The Fox Valley WDA population was just under 572,000 in

2004 WDA Population and Percent Change from 2000



Source: WI Dept. of Administration, Demographic Services Center

2004. The WDA makes up 10.3 percent of Wisconsin's population. Since 2000, the region has added nearly 22,200 more residents for a growth rate of 4.0 percent. The growth rate in the WDA was well above the statewide average of 3.2 percent over the same time period.

The most populous of the regional counties, Outagamie has added the most population at just over 7,7000 residents for a growth rate of 4.8 percent. Outagamie is the sixth most populous county in the state. The least populated county, Green Lake had a growth rate of 1.3 percent, while Calumet had the fastest growth rate at 9.2 percent and added 3,730 people.

Population change is the net result of two occurrences, migration and natural change. A fundamental understanding of these occurrences trumps the simple rate of overall population change or the pluses and minuses. The region's increase of 22,193 residents over the last four years was 8,269 from natural increase (births minus deaths) and 13,924

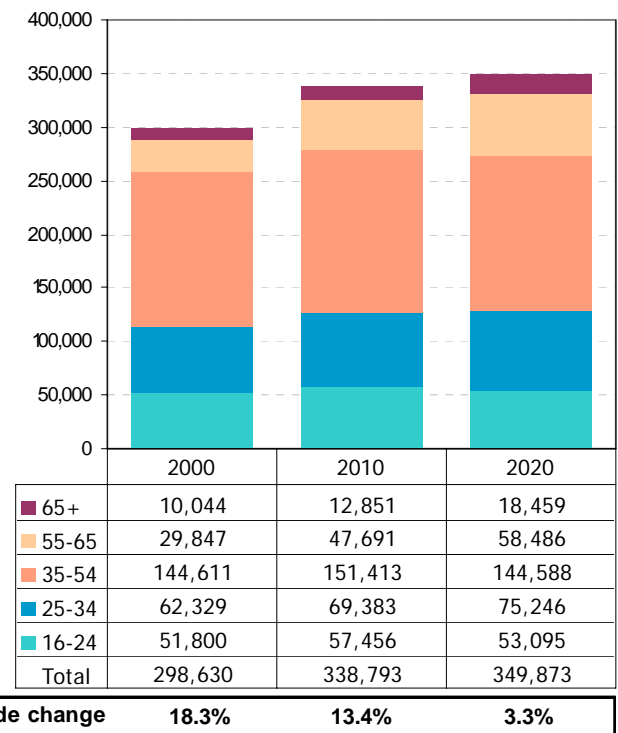
from net migration (number moving to area minus number moving away from the area). Five of every eight new residents have moved to the Fox Valley WDA versus being born in the region.

Population change has an impact on current and forthcoming development endeavors, be they economic or workforce development. Planners need to be cognizant of the impact demographic features and anticipated changes in the region's population. It is critical they have an awareness of the area's projected age characteristics and its effects on consumer behavior and the workforce.

Population projections for the period 2005 to 2030 in the Fox Valley Area forecast growth over 105,633 more residents (+18.4 percent). Outagamie County will have the greatest growth of the seven counties in the region. The region's projected growth of 18.4 percent is above the statewide projected growth rate of 15.3 percent.

There has been a great deal of discussion concerning Wisconsin's aging population. This has also been a national issue, but it is likely to become a more salient one in the Midwest United States. A great deal of the discussion relates

Fox Valley WDA Labor Force Projections by Age



Source: DWD, Office of Economic Advisors, August 2004

to the movement of the historically large “baby boomer” generation (population born between 1946—1964) as it moves through its life’s stages and now the first members of that generation are close to retirement age. The following two generational groups following this large group are comparatively smaller. To put the size of the boomer generation in perspective, today’s residents age 65 to 84 years of age equal one out of every ten Fox Valley Area residents. By 2030, when the baby boomer generation reaches these ages, they will comprise one out of every six residents. This group will grow from 62,405 residents to 122,373 residents over the next 25 years. Currently this group makes up the 40 to 59 year age cohort in the area. They make up just over one third of the area’s population and 57 percent of the population aged 20 through 69, the prime working age population.

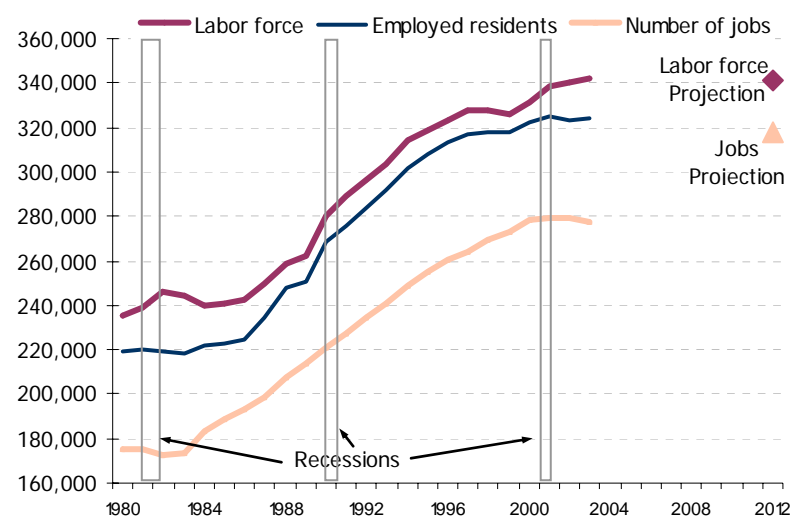
Broad age group analysis of the Fox Valley WDA shows that those aged 19 years and younger will increase by over 13.717 (8.7 percent) between 2005 to 2030. However, the percent of the total population will drop from 27.4 percent in 2005 to 25.1 percent in 2030. The number of those between 20 and 59 years, ones’ prime working years, will increase about 9.1 percent (13,966). This group will make up 48.9 percent of the population compared to 55.5 percent of the population in 2005. The number of residents ages 60 years and older is projected to increase by 79.2 percent. The projections show this group growing from 17.1 percent of the area’s population in 2005 to 25.9 percent of the population in 2030. While the number of workers in the prime working aged population will increase, the increase is not large and may create difficulty when it comes to economic expansion in the area.

The graph on the lower right of the previous page paints a scenario of what the projected Fox Valley WDA labor force will look like—by age. This scenario assumes that labor force participation rates by age, as measured by the U.S. Census, will maintain their current levels throughout year 2020. Crossing these participation rates with population projections helps estimate projected labor force. The regional labor force is projected to grow 16.7 percent from 2000 to 2020. While this does show growth and age changes

in the regional labor force, it does not indicate quantitative changes of the labor force as it ages.

The slower labor force growth and age composition will bring about a multitude workforce development issues to contend with during this time period. One issue is that there will be shortage of younger of workers “in the pipeline” to replace those who are leaving the workforce permanently or are progressing up the ladder of their careers. There are many occupations that are typically filled by those of a certain age

Historic & Projected Labor Force & Jobs in Fox Valley WDA



Source: WIDWD, Bureau of Workforce Information & Office of Economic Advisors

bracket, usually entry-level occupations. Other occupations typically requiring post-secondary/vocational education or skill sets will also be in need of new (read: younger) workers such as in nursing and other healthcare occupations. Another issue will be the loss of the skills and knowledge of retirees.

The economy will change as the population ages meaning that the services and goods in demand will change as consumer behavior changes. There is no better example of this than the healthcare industry. An increase in age and an increased demand for healthcare services are positively correlated to the need for workers.

The workforce development profiles are produced by the Office of Economic Advisors in the Wisconsin Department of Workforce Development. The author of this profile and regional contact for additional labor market information is:

Richard Seidemann
3620 Wilgus Avenue
Sheboygan, WI 53081
Phone: 920-208-5809
email: richard.seidemann@dwd.state.wi.us